



#3

As a below-named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled LOW LATENCY MULTI-LEVEL COMMUNICATION INTERFACE, the specification of which

(check one)	is attached hereto.	
	X was filed on <u>January 6,2000</u> Application Serial No. <u>09/478,916</u> and was amended on	as
	(if applicable)	

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a).

I hereby claim the benefit under Title 35, United States Code § 119(e) of any United States provisional application(s) listed below.

60/158,189	10/19/99
(Application Serial No.)	(Filing Date)

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Forei	gn Application(s)		<u>Priority</u>	Claimed
(Number)	(Country)	(Day/Month/Year Filed)	Yes	No
(Number)	(Country)	(Day/Month/Year Filed)	Yes	No

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulation, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

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(Application Serial No	).) (	Filing	Date)		•	itus)
•				(patented,	pending,	abandoned)
(Application Serial No	).) (	Filing	Date)		(Sta	itus)
				(patented,	pending,	abandoned)
(Application Serial No	).) (	Filing	Date)		(St	atus)
•	·	_		patented,	pending,	abandoned)
Direct all telephone o	alls to	Gary S.	Willia	ms at (650)	493-4935	•
Address all correspond	lence to:					
		NIE & E				
	330 Palo Al	00 Hillv				
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File No. 9797-050-999						
I hereby declare that	all state	omonta 1	mada ha	roin of my	oum knoud	odao ara
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be true; and further t						
that willful false sta					_	-
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application or any pat		_		rdize the v	alidity o	r che
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m.11						
<pre>Full name of   first inventor:</pre>	TARED 1	L. ZERBI	₹			
11100 1111011001.		7 //	- <u>-</u>	7.		
Inventor's signature:		مسس	×.	<i>y</i> -		
Date:	3	11310	0			
Date:			·			
Residence:	WOODSID	E, CALII	FORNIA			

WOODSIDE, CALIFORNIA 94062

Citizenship:

U.S.A.

Post Office Address: 431 HILLSIDE DRIVE

Full name of	_
second inventor:	BRUNO W. GARLEPP
Inventor's signature:	3/3/00 · Jaly
Date:	3/3/00 -
Date.	
Residence:	Austin, Texas
Citizenship:	U.S.A.
Post Office Address:	10613 REDMOND ROAD
	AUSTIN, TEXAS 79739
Full name of	
third inventor:	PAK S. CHAU
Inventor's signature:	
Date:	
Residence:	SAN JOSE, CALIFORNIA
Citizenship:	HONG KONG
Post Office Address:	1677 KLIPSPRINGER DRIVE
	SAN JOSE, CALIFORNIA 95124
Full name of	
fourth inventor:	KEVIN S. DONNELLY
Inventor's signature:	
Date:	
Residence:	LOS ALTOS, CALIFORNIA
Citizenship:	U.S.A.
Post Office Address:	585 GIRALDA DRIVE
	LOS ALTOS, CALIFORNIA 94024

Full name of second inventor:	BRUNO W. GARLEPP
Inventor's signature:	
Date:	•
Residence:	Austin, Texas
Citizenship:	U.S.A.
Post Office Address:	10613 REDMOND ROAD
	AUSTIN, TEXAS 79739
Full name of third inventor:	PAK S CHAU
Inventor's signature:	Caudia
Date:	March 9, 2000
Residence:	SAN JOSE, CALIFORNIA
Citizenship:	HONG KONG
Post Office Address:	1677 KLIPSPRINGER DRIVE
	SAN JOSE, CALIFORNIA 95124
Full name of fourth inventor:	KEVIN S. DONNELLY
Inventor's signature:	Merr S Dimer
Date:	March 9, 2000
Residence:	LOS ALTOS, CALIFORNIA
Citizenship:	U.S.A.
Post Office Address:	585 GIRALDA DRIVE
	LOS ALTOS, CALIFORNIA 94024

<pre>Full name of    fifth inventor: _</pre>	MARK A. HOROWITZ
Inventor's signature:	MAN HOVE
Date:	3/31/00
Residence:	MENLO PARK, CALIFORNIA
Citizenship:	U.S.A.
Post Office Address:	1309 SAN MATEO DRIVE
	MENLO PARK, CALIFORNIA 94025
Full name of sixth inventor:	STEFANOS SIDIROPOULOS
Inventor's signature:	los -
inventor a signature.	9/3/2000
Date:	7131 2000
Residence:	PALO ALTO, CALIFORNIA
Citizenship:	GREECE
Post Office Address:	731 ELLSWORTH STREET
	PALO ALTO, CALIFORNIA 94036
Full name of seventh inventor:	BILLY W. GARRETT, JR.
Inventor's signature:	Bill W Sound ha
Date:	3/9/00
Residence:	MOUNTAIN VIEW, CALIFORNIA
Citizenship:	U.S.A.
Post Office Address:	928 WRIGHT AVENUE, #405
	MOUNTAIN VIEW, CALIFORNIA 94043

Full name of	
eighth inventor:	CARL W. WERNER
Inventor's signature:	Cal W. Wen
	2/9/00
Date:	<u> </u>
	<b>→</b>
Residence:	SAN JOSE, CALIFORNIA
Citizenship:	U.S.A.
<u></u>	
Post Office Address:	1449 CARRINGTON CIRCLE
rose orrice address.	1117 0.200
	SAN JOSE, CALIFORNIA 95125
	SAN JOSE, CALIFORNIA 95125

## POWER OF ATTORNEY BY ASSIGNEE AND CERTIFICATE UNDER 37 CFR 3.73(b)

To the Commissioner of Patents:

The undersigned assignee of the entire interest in application for letters patent entitled: LOW LATENCY MULTI-LEVEL COMMUNICATION INTERFACE, and having the named inventors: JARED L. ZERBE, BRUNO W. GARLEPP, PAK S. CHAU, KEVIN S. DONNELLY, MARK A. HOROWITZ, STEFANOS SIDIROPOULOS, BILLY W. GARRETT, JR., and CARL W. WERNER, hereby revokes all previous Powers of record and appoints the following attorneys to transact all business in the Patent Office connected therewith: Leslie Misrock (Reg. No. 18872), Harry C. Jones, III (Reg. No. 20280), Berj A. Terzian (Reg. No. 20060), Gerald J. Flintoft (Reg. No. 20823), David Weild, III (Reg. No. 21094), Jonathan A. Marshall (Reg. No. 24614), Barry D. Rein (Reg. No. 22411), Stanton T. Lawrence, III (Reg. No. 25736), Charles E. McKenney (Reg. No. 22795), Philip T. Shannon (Reg. No. 24278), Francis E. Morris (Reg. No. 24615), Charles E. Miller (Reg. No. 24576), Gidon D. Stern (Reg. No. 27469), John J. Lauter, Jr. (Reg. No. 27814), Brian M. Poissant (Reg. No. 28462), Brian D. Coggio (Reg. No. 27624), Rory J. Radding (Reg. No. 28749), Stephen J. Harbulak (Reg. No. 29166), Donald J. Goodell (Reg. No. 19766), James N. Palik (Reg. No. 25510), Thomas E. Friebel (Reg. No. 29258), Laura A. Coruzzi (Reg. No. 30742), Jennifer Gordon (Reg. No. 30753), Jon R. Stark (Reg. No. 30111), Allan A. Fanucci (Reg. No. 30256), Geraldine S F. Baldwin (Reg. No. 31232), Victor N. Balancia (Reg. No. 31231), Samuel B. Abrams (Reg. No. 30605), Steven I. Wallach (Reg. No. 35402), Marcia H. Sundeen (Reg. No. 30893), Paul J. Zegger (Reg. No. 33821), Edmond R. Bannon (Reg. No. 32110), Bruce J. Barker (Reg. No. 33291), Adriane M. Antler (Reg. No. 32605), Thomas G. Rowan (Reg. No. 34419), James G. Markey (Reg. No. 31636), Thomas D. Kohler (Reg. No. 32797), Scott D. Stimpson (Reg. No. 33607), Gary S. Williams (Reg. No. 31066), William S. Galliani (Reg. No. 33885), Ann L. Gisolfi (Reg. No. 31956), Todd A. Wagner (Reg. No. 35399), Scott B. Familant (Reg. No. 35504), and Kelly D. Talcott (Reg. No. 39582), and, all of Pennie & Edmonds LLP, whose addresses are 1155 Avenue of the Americas, New York, New York 10036, 1667 K Street N.W., Washington, DC 20006 and 3300 Hillview Avenue, Palo Alto, CA 94304, to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

In addition, the undersigned assignee also appoints Charles E. Shemwell (Reg. No. 40,171), of Rambus Inc., to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

In accordance with 37 CFR 3.73 the assignee hereby certifies that it is the assignee of the entire right, title and interest in the patent application identified above by virtue of an Assignment from the inventor(s). The undersigned has reviewed all the documents in the chain of title of the patent application identified above and, to the best of undersigned's knowledge and belief, title is in the assignee identified below.

The undersigned hereby declares that all statements made herein of his/her own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Title 18, United States Code, 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Direct all telephone calls to <u>GARY S. WILLIAMS</u> at (650) 493-4935. Address all correspondence to: PENNIE & EDMONDS LLP

3300 Hillview Avenue Palo Alto, California 94304

RAMBUS INC.

By: Charles E. Shemwell

Signature:

Title: Patent Counsel

Address: 2465 Latham Street

Mountain View, CA 94040

Date: April 3, 2000 File No. 9797-0050-999 (RA139)

CA1 - 240521.1

## DECLARATION FOR PATENT APPLICATION

As a below-named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled LOW LATENCY MULTI-LEVEL COMMUNICATION INTERFACE, the specification of which

(check one)	is attached hereto.	
	X was filed on <u>January 6,2000</u> Application Serial No. <u>09/478,916</u> and was amended on	
	(if applicable)	_

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(Application Serial No.)	(Filing Date)

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(Number)	(Country)	(Day/Month/Year Filed)	Yes	No
(Number)	(Country)	(Day/Month/Year Filed)	Yes	No

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(Application Carial No. )	(Filing Date)		•	atus).
Application Serial No.)	(11111)	(patented,	pending,	abandoned)
	(Filing Date)		(St	atus)
Application Serial No.)	(Filling Date)	(patented,	pending,	abandoned)
(Application Serial No.)	(Filing Date)			tatus)
Application Selial No.,	, (	patented,	pending,	abandoned)
Direct all telephone ca	an to come a will:	ams at (650	) 493-493	5. ·.
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Address all corresponder				
	PENNIE & EDMOND 3300 Hillview A Palo Alto, Californ	venue		
File No. 9797-050-999				
I hereby declare that a true and that all state be true; and further th that willful false stat or imprisonment, or bot that such willful false application or any pate	ments made on informat these statements ements and the like th, under Title 18, a statements may jec	were made w so made are United State	ith the k punishab s Code, §	nowledge le by fine
Full name of first inventor:	JARED L. ZERBE			
Inventor's signature: _				
Date:				
Residence:	WOODSIDE, CALIFORN	IA		_ <del></del>
Citizenship:	U.S.A.			
Post Office Address:	431 HILLSIDE DRIVE			

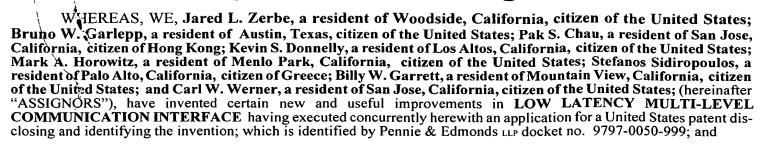
WOODSIDE, CALIFORNIA 94062

J

Full name of fifth inventor:!	MARK A. HOROWITZ	
Inventor's signature:		
Date:	*	
Residence:	MENLO PARK, CALIFORNIA	
Citizenship:	U.S.A.	
Post Office Address:	1309 SAN MATEO DRIVE	
	MENLO PARK, CALIFORNIA 94025	
Full name of sixth inventor:	STEFANOS SIDIROPOULOS	
Inventor's signature:		
Date:		
Residence:	PALO ALTO, CALIFORNIA	
Citizenship:	GREECE	
Post Office Address:	731 ELLSWORTH STREET	
	PALO ALTO, CALIFORNIA 94036	
Full name of seventh inventor:	BILLY W. GARRETT, JR.	
Inventor's signature:		
Date:		
Residence:	MOUNTAIN VIEW, CALIFORNIA	
Citizenship:	U.S.A.	
Post Office Address:	928 WRIGHT AVENUE, #405	
	MOUNTAIN VIEW, CALIFORNIA 94043	

eighth inventor:	CARL W. WERNER
Inventor's signature:	
Date:	
Residence:	SAN JOSE, CALIFORNIA
Citizenship:	U.S.A.
Post Office Address:	1449 CARRINGTON CIRCLE
	CAN JOSE CALIFORNIA 95125

## ASSIGNMENT



WHEREAS, RAMBUS INC., a Delaware Corporation located in Mountain View, California 94040, (hereinafter "ASSIGNEE") is desirous of obtaining our entire right, title and interest in and to said application and the invention disclosed therein, and in and to all embodiments of the invention, heretofore conceived, made or discovered by said Inventors (all collectively hereinafter termed "said invention"), and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter termed "patents") thereon granted in the United States and foreign countries. to and under the said invention and the said application:

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, we, the said ASSIGNORS, hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, our entire right, title and interest in, to and under the said invention, and the said application for U.S. Letters Patent, and any and all divisions, continuations and renewals thereof, and any and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof;

WE HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE HEREBY covenant and agree that we have full right to convey the entire interest herein assigned, and that we have not executed, and will not execute, any agreement in conflict herewith.

AND WE HEREBY further covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.

The terms, covenants and conditions of this assignment shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding on said Inventors, their heirs, legal representatives and assigns.

IN TESTIMONY WHEREOF, said Inventors have executed and delivered this instrument to said Assignee the day and year below written.

1.		IAREO L. ZERRE	
State of California	)	JARED L. ZERBE	
County of	) SS.: )		
subscribed to the within in	strument and acknowle er signature on the instr nent.	basis of satisfactory evidence) to be the dged to me that he/she executed the same ument the person, or the entity upon beha	in his/her authorized
NOTARY SEAL			
		(Typed name of Notary)	
2.	· ·	BRUNO W. GARLEPP	
State of California	)	BRUNO W. GARLEFF	
County of	) SS.: )	•	
subscribed to the within in	strument and acknowle er signature on the instr nent.	basis of satisfactory evidence) to be the page dependence of the same dependence on the person, or the entity upon behavior.	in his/her authorized
NOTARY SEAL		(Typed name of Notary)	

3.	PAK S. CHAU
State of California ) County of )	SS.:
subscribed to the within instrument and	efore me,, personally appeared <u>PAK S. CHAU</u> , me on the basis of satisfactory evidence) to be the person whose name is d acknowledged to me that he/she executed the same in his/her authorized on the instrument the person, or the entity upon behalf of which the person
NOTARY SEAL	(Typed name of Notary)
4.	KEVIN S. DONNELLY

On \_\_\_\_\_\_ before me, \_\_\_\_\_\_, personally appeared <u>KEVIN S.</u> <u>DONNELLY</u>, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her

authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which

(Typed name of Notary)

) ) SS.: )

State of California

**NOTARY SEAL** 

County of

the person acted, executed the instrument. WITNESS my hand and official seal.

5.		

MARK A. HOROWITZ

State of California	) ) SS.:	
County of	) 55.:	
whose name is subscribed to the with	in instrument and ackr her signature on the in ıment.	, personally appeared MARK A. on the basis of satisfactory evidence) to be the person nowledged to me that he/she executed the same in his/her astrument the person, or the entity upon behalf of which
NOTARY SEAL		(Typed name of Notary)
6.		STEFANOS SIDIROPOULOS
State of California  County of	) ) SS.: )	
whose name is subscribed to the with	in instrument and ackr her signature on the in ıment.	, personally appeared <u>STEFANOS</u> me on the basis of satisfactory evidence) to be the person nowledged to me that he/she executed the same in his/her astrument the person, or the entity upon behalf of which
NOTARY SEAL		(Typed name of Notary)

DIVINI CARRENT

BILLY W	'. GARRETT	· · · · · · · · · · · · · · · · · · ·

State of California	)	
County of	) SS.: _ )	
name is subscribed to the with	iin instrument and acl y his/her signature on instrument.	, personally appeared <u>BILLY W</u> e on the basis of satisfactory evidence) to be the person whose knowledged to me that he/she executed the same in his/her the instrument the person, or the entity upon behalf of which
NOTARY SEAL		(Typed name of Notary)
0		
8.		CARL W. WERNER
State of California  County of	) SS.:	
On	o me (or proved to me iin instrument and acl y his/her signature on instrument.	, personally appeared <u>CARL W.</u> on the basis of satisfactory evidence) to be the person whose knowledged to me that he/she executed the same in his/her the instrument the person, or the entity upon behalf of which
NOTARY SEAL		(Typed name of Notary)